

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application;

--1. (Amended) A radio communication system comprising:

a plurality of wireless networks, each wireless network ~~comprising~~ including a plurality of radio communication apparatuses and a control station allocating a resource to each radio communication apparatus of said plurality of radio communication apparatuses,

wherein, upon detection of interference between networks of said plurality of wireless networks, a buffer frame period that is different from a ~~normal~~ transmission frame period is set in one of the interferring networks so as to adjust a positional relationship of frame periods used by the interferring networks.

--2. (Currently Amended) A radio communication apparatus operating as a control station in a radio communication environment wherein a plurality of wireless networks operating under the control of a control station coexist, the radio communication apparatus comprising:

beacon transmitting means for setting a transmission frame period of a local network and transmitting beacon information

regarding resource allocation at a predetermined position of the transmission frame period;

[[an]] interference detecting means for detecting whether the local network interferes with another network; and

buffer frame period setting means for setting a buffer frame period having a different frame period to change the position of a transmission frame period upon detection of interference between networks.

--3. (Currently Amended) The radio communication apparatus according to Claim 2, wherein the interference detecting means detects interference of beacon information based on ~~the basis~~ of parameters obtained by receiving beacon information transmitted from another network.

--4. (Currently Amended) The radio communication apparatus according to Claim 2, wherein

the transmission frame period includes a contention free period wherein data communication is effected based on ~~the basis of~~ range reservation/allocation, and

the interference detecting means detects whether contention free periods are synchronized between networks based

on ~~the basis of~~ parameters obtained by receiving beacon information transmitted from another network.

--5. (Currently Amended) The radio communication apparatus according to Claim 4, wherein the buffer frame setting means sets a buffer frame period that is shorter than a ~~normal~~ transmission frame period so as to ease the interference of contention free ~~period~~ periods between networks.

--6. (Currently Amended) The radio communication apparatus according to Claim 2, wherein the interference detecting means detects interference between networks based on ~~the basis of~~ information from a radio communication apparatus in the local network.

--7. (Currently Amended) The radio communication apparatus according to Claim 2, wherein the buffer frame setting means sets a buffer frame period that is shorter than a ~~normal~~ transmission frame period so as to ease collision of transmission positions of beacon information between networks.

--8. (Currently Amended) A radio communication method for a control station to operate in a radio communication environment wherein a plurality of wireless networks operating under control of the control station coexists, the method comprising:

a beacon transmission step for setting a transmission frame period of a local network and transmitting beacon information regarding resource allocation at a predetermined position of the transmission frame period;

an interference detection step for detecting whether the local network interferes with another network; and

a buffer frame period setting step for setting a buffer frame period ~~having a~~ that is different than a transmission frame period, thereby to change ~~[[the]]~~ a position of ~~[[a]]~~ the transmission frame period upon detection of interference between networks.

--9. (Currently Amended) The radio communication method according to Claim 8, wherein the interference detection step detects interference of beacon information based on ~~the basis~~ of parameters obtained by receiving beacon information transmitted from another network.

--10. (Currently Amended) The radio communication method according to Claim 8, wherein

the transmission frame period includes a contention free period wherein data communication is effected based on ~~the basis of~~ range reservation/allocation, and

the interference detection step detects whether contention free periods are synchronized between networks based on ~~the basis of~~ parameters obtained by receiving beacon information transmitted from another network.

--11. (Currently Amended) The radio communication method according to Claim 10, wherein the buffer frame setting step sets a buffer frame period that is shorter than a ~~normal~~ transmission frame period so as to ease the interference of contention free periods between networks.

--12. (Currently Amended) The radio communication method according to Claim 8, wherein the interference detection step detects interference between networks based on ~~the basis of~~ information from a radio communication apparatus in the local network.

--13. (Currently Amended) The radio communication method according to Claim 12, wherein the buffer frame setting step sets a buffer frame period that is shorter than a ~~normal~~ transmission frame period so as to ease collision of transmission positions of beacon information between networks.

--14. (Currently Amended) A radio communication apparatus operating in a particular wireless network in a radio communication environment wherein a plurality of wireless networks operating under control of a control station coexists, the radio communication apparatus comprising:

beacon information receiving means for receiving beacon information from a control station of a local network in a predetermined beacon information receiving range;

beacon information detecting means for detecting beacon information from a control station of another network;

collision detecting means for detecting whether beacon information of the local network collides with beacon information of another network; and

interference informing means for notifying a control station of the local network of a beacon information collision detection result.

--15. (Original) A radio communication apparatus according to Claim 14, wherein the beacon information detecting means sets a redundant time for a beacon information receiving range to detect beacon information from a control station of another network.

--16. (Original) A radio communication apparatus according to Claim 14, wherein the interference informing means for reporting a beacon information collision detection result by using a management time slot allocated to a control station of the local network.

--17. (Original) A radio communication method carried out in a particular wireless network in a radio communication environment wherein a plurality of wireless networks operating under control of a control station coexists, comprising:

a beacon information receiving step for receiving beacon information from a control station of a local network in a predetermined beacon information receiving range;

a beacon information detection step for detecting beacon information from a control station of another network;

a collision detection step for detecting whether beacon information of the local network collides with beacon information of another network; and

an interference informing step for notifying a control station of the local network of a beacon information collision detection result.

--18. (Original) A radio communication method according to Claim 17, wherein the beacon information detection step sets a redundant time for a beacon information receiving range to detect beacon information from a control station of another network.

--19. (Original) A radio communication method according to Claim 17, wherein the interference informing step for reporting a beacon information collision detection result by using a management time slot allocated to a control station of the local network.

--20. (Currently Amended) A computer program described in a computer-readable format so as to carry out[[,]] on a computer system, processing for a control station to operate in



a radio communication environment, wherein a plurality of wireless networks operating under the control of a control station coexist, comprising:

a beacon transmitting step for setting a transmission frame period of a local network and transmitting beacon information regarding resource allocation at a predetermined position of the transmission frame period;

an interference detection step for detecting whether the local network interferes with another network; and

a buffer frame period setting step for setting a buffer frame period ~~having a~~ that is different than a transmission frame period, thereby to change ~~[[the]]~~ a position of ~~[[a]]~~ the transmission frame period upon detection of interference between networks.

--21. (Original) A computer program described in a computer-readable format so as to carry out, on a computer system, processing for an operation in a particular wireless network in a radio communication environment wherein a plurality of wireless networks operating under the control of a control station coexist, comprising:

a beacon information receiving step for receiving beacon information from a control station of a local network in a predetermined beacon information receiving range;

a beacon information detection step for detecting beacon information from a control station of another network;

a collision detection step for detecting whether beacon information of the local network collides with beacon information of another network; and

an interference informing step for notifying a control station of the local network of a beacon information collision detection result.